

Summer 2024 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Hub is pleased to offer current UBC graduate students the opportunity to work on sustainability internship projects. Successful candidates work under the guidance of a mentor from the partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region. These opportunities are paid. The pay rate for the summer 2024 program is \$27.50/hour or \$6,875 for a 250-hour project.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the application guide on the Apply page to confirm your eligibility before applying.

Applications close at midnight on Sunday January 28, 2024.

>This is a Pathways to Net Zero Embodied Carbon Project<

UBC Sustainability Hub is undertaking a research and knowledge building project “Pathways to Net Zero Embodied Carbon in Buildings” to explore challenges and pilot solutions to accelerate Canada’s carbon emissions reductions from building materials. The Pathways projects are a collaboration with BC municipalities to identify and advance local solutions and strategies for embodied carbon reductions, within the constraints and opportunities of that community. Successful candidates will be asked to participate in knowledge sharing events and activities.

Project Title: Research to inform embodied carbon requirements in Squamish’s Community Climate Action Plan

Project Background & Overview

Buildings are the third largest contributor to Canada’s total carbon emissions, and one third of building emissions correspond to embodied carbon emissions. These are the emissions generated by the production, installation, use and recycling and/or disposal of a building’s materials. They are distinct from operational carbon generated from energy used in the building for electricity, heating and cooling. While there are currently many policies, at various levels of government, intended to reduce operational emissions from buildings, there are relatively few targeting embodied emissions from the built environment.

District of Squamish is committed to reducing its greenhouse gas (GHG) emissions by 45% by 2030. In anticipation of this commitment, the District is updating its [Community Climate Action Plan \(CCAP\)](#) to guide Squamish toward a low-carbon future. The guide includes targets, actions, and impactful measures towards emissions reduction in the community of Squamish.

Project Description

The purpose of this project is to support the integration of embodied carbon considerations into the next iteration of Squamish’s CCAP. This work will align with the Squamish government’s

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commitment to support reducing the carbon footprint at a local and community level and guide Squamish towards a low carbon future.

The project will focus on understanding key emissions reductions mechanisms and levers for reducing the carbon footprint at the community level. The current CCAP includes emissions and potential actions within the operational scope of the Squamish community, but excludes the embodied emissions associated with upstream and downstream activities. Our aim is to help quantify Squamish's embodied emissions and identify actionable steps for the district based on the [Embodied Emissions Guide](#).

The insights garnered from this project are intended to be incorporated into the district's CCAP and used to inform outreach and educational activities, demolition and deconstruction guidelines, incentives for material reuse, and planning and zoning policies. Part of this project will include looking for ways to integrate actions with other CCAP initiatives (such as home retrofits and landfill waste reduction). It is not yet determined if embodied emissions will be incorporated into Squamish's inventory for the next CCAP iteration, but some quantification and modelling is likely to be required. (Assistance will be offered.)

Project Scope

- Review the CCAP, the Embodied Emissions Guide (on the CEA website) and relevant sections of the climate action plans of other local jurisdictions to identify opportunities and best practices to integrate embodied emissions requirements in the future Squamish CCAP. Other local jurisdictions will include City of Vancouver, Saanich, North Vancouver, and Nelson.
- Research to identify best practices for quantifying embodied emissions at the neighbourhood scale
- Time permitting and depending on the skills and interests of the Scholar, provide estimates of emissions reductions in 3 to 5 priority areas (Data and calculation methodologies will be provided by the project mentor. Priority areas will be determined in consultation with the project mentor)
- Based on the research provide recommendations on actions Squamish can take to update their CCAP

Deliverables

- A final report containing a summary of the work completed
- An executive summary for the public-facing [Scholars Project Library](#).
- A presentation to the project team and other stakeholders.

Time Commitment and Work Arrangement

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2024
- The Scholar is to complete their hours between 8 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.

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Required / Preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Familiarity with benchmarking methods and tools, an asset
- Familiarity preparing feasibility studies, an asset
- Familiarity with embodied carbon emissions in buildings, an asset
- Demonstrated experience in embodied carbon emissions modelling and analysis

Applications close **midnight Sunday January 28, 2024**

Apply here: [Click here to apply](#)

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 23, 2024. [Click here for details and to register.](#)

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.

<https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae>

<https://www.grad.ubc.ca/current-students/graduate-pathways-success>

<https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services>